

IP NETWORK OVER A PARTIALLY MESHED FRAME RELAY NETWORK

Abstract

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An IP network over a partially meshed Frame Relay network wherein the Frame Relay network includes at least a hub which is linked to each one of a set of spokes by a Permanent Virtual Circuit (PVC) identified by a first Data Link Connection Identifier (DLCI) associated with the hub and a second DLCI associated with the spoke. The hub and the set of spokes define an IP subnet having a subnet address. Each spoke has an inverse ARP table in which the first DLCI identifying a PVC is mapped with the IP address of the hub as entry. The inverse ARP table of each spoke comprises, further to the entries corresponding to the IP addresses of the hubs to which the spoke is linked, at least a default entry identifying the subnet address whereby any frame the IP address of which corresponds to a spoke is routed to the hub by scanning inverse ARP table.